



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,088	01/27/2004	Louis J. Lundell	CS23263RL	2202
20280	7590	10/15/2007	EXAMINER	
MOTOROLA INC			HAQ, MOHAMMAD AAMIR	
600 NORTH US HIGHWAY 45				
W4 - 39Q				
LIBERTYVILLE, IL 60048-5343			ART UNIT	PAPER NUMBER
			2614	
			MAIL DATE	DELIVERY MODE
			10/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/766,088	LUNDELL ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Aamir Haq	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 August 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 – 3, 5, 9, 13, 14, 16, 17, 19, 21, 23, 25, and 26 is/are pending in the application.
  - 4a) Of the above claim(s) 2,3,5,9,13,14,16,17,19,21,25 and 26 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. This action is in response to applicant's amendment filed on 8/10/2007. Claims 1 – 3, 5, 9, 13, 14, 16, 17, 19, 21, 23, 25, and 26 are pending in the present application. Claims 2, 3, 5, 9, 13, 14, 16, 17, 19, 21, 25, and 26 are withdrawn from consideration.

**This action is made final.**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,254,249 (Kim et al.) hereinafter "Kim" in view of US 6,950,686 (Won) further in view of US 2002/0177467 (Hsu).

**As to claims 1, Kim teaches a mobile communication device, comprising:**

- a first housing (see fig. 1 – 3 of Kim). Note that the first housing is interpreted as the housing with the keypad (20 in fig. 3 of Kim);
- a hinge coupled to the first housing (18 in fig. 3 of Kim);
- a second housing coupled to the hinge (12 in fig. 3 of Kim);
- a mobile communication device numeric keypad (20 in fig. 3 of Kim) coupled to the first housing, the mobile communication device numeric keypad having an external visible portion (see fig. 3 of Kim);

- a light source (19 in fig. 3 and fig. 7 of Kim), connected to the second housing, the light source (18) configured to direct light substantially (see fig. 7 of Kim) at the external visible portion of the mobile communication device numeric keypad (20) to illuminate the mobile communication device numeric keypad.
- wherein the mobile communication device further comprises,
- a first housing (see fig. 1 – 3 of Kim). Note that the first housing is interpreted as the hosing with the keypad (20 in fig. 3 of Kim);
- a hinge coupled to the first housing (18 in fig. 3 of Kim);
- a second housing coupled to the hinge (12 in fig. 3 of Kim);
- wherein the mobile communication device numeric keypad (20 of Kim) is coupled to the first housing;

As shown in figures 3 and 7, Kim discloses a light source provided in the center region of the hinge to direct light at the keypad (col. 4 lines 27 – 31 of Kim). Kim does not disclose that the light source is coupled to the “hinge section” to expose the light source external to mobile device when the device is closed.

However, Kim teaches, “it should be noted that the present invention is not limited thereto but various changes and modifications can be embodiment to include at least one lamp” (col. 2 lines 41 – 43 of Kim). Thus, it was contemplated at the time of invention that modifications could be made as long as they include “at least one lamp” and do not depart from the scope of the invention. An obvious change or modification to one of ordinary skill in the art at the time of the invention would have been to use the invention of Kim in various different style, type, brand, shape, and configuration mobile

Art Unit: 2614

phones (without departing from the scope of the invention). For example, it would have been obvious to one of ordinary skill in the art that the cellular phone with lamps design of Kim could be applied to the commonly used mobile phone design of Won.

Won teaches a notoriously old and well-known clamshell configuration in which the hinge is integrated or molded into the housing (see fig. 1 of Won). The configuration of Won includes the claimed "hinge section coupled to the first housing including a pivot housing" (see 3 in fig. 3 of Won). Moreover, Won the configuration of Won includes the claimed "second housing including a second housing hinge section" (see 7 in fig. 1 of Won).

When the invention of Kim is used in the old and well-known clamshell configuration of Won, the light source (19 in fig. 3 of Kim) would be centrally positioned in the "second housing hinge section" (see 7 in fig. 1 of Won). Thus, when the mobile device was in an open state, the light source would direct light "substantially" at the keypad (see fig. 7 of Kim). Furthermore, when the mobile device was in a closed state, the light source would inevitably "expose the light source external to the mobile communication device," as claimed by the applicant.

In summary, the idea of using a light source to direct light at the keypad (see fig. 7 of Kim) was expressly contemplated by Kim. Moreover, the idea of using the light source to expose light external to the mobile device was expressly contemplated by Kim (see fig. 6 of Kim). Lastly, the idea of changing or modifying the invention (i.e. to conform to other mobile phone designs) was contemplated by Kim. Thus, Kim expressly contemplated and disclosed both configurations claimed by the applicant and

that the design could be modified to conform to other mobile phone designs. When conformed to the old and well known clamshell configuration of Won, the result is a light source that directs light at the keypad when the mobile device is open and directs light external to the device when the mobile device is closed.

Additionally, Kim and Won do not disclose expressly that the light source is one of an incandescent light source and a light emitting diode light source (LED) or a laser pointer. However, Hsu discloses that a light source within a mobile device may be a bulb, LED, laser beam emitter or other suitable device (Abstract, ¶0003, 0013 of Hsu).

Kim, Won and Hsu are analogous art because they are directed toward the same problem solving area, namely mobile devices. At the time of the invention it would have been obvious to a person ordinary skill in the art to use an incandescent light, LED or laser beam in view of the teachings of Hsu in the mobile communication device of Kim. The motivation for doing so would have been because Kim uses a plurality of "illuminating devices" (14-1, 14-2, 14-3, 14-4, 15 and 19 in figs. 1 – 3). It would have been obvious to use LEDs or incandescent lights as the "illuminating devices" since these are the notoriously old and well known light sources. LEDs are particularly attractive for mobile devices since LEDs require low power. Additionally, a laser beam would enable a user to use the phone as a pointer (¶0003, 0013, 0014 of Hsu). The configuration of Kim would be perfect for laser beam pointer as shown in fig. 6 of Kim. Therefore, it would have been obvious to combine Hsu with Kim and Won to obtain the invention as specified in claim 1.

Art Unit: 2614

3. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,254,249 (Kim et al.) in view of US 6,950,686 (Won) further in view of US 2002/0177467 (Hsu) further in view of US 2003/0107554 (Motegi).

**As to claim 23,** Kim, Won and Hsu have been discussed above. Thus, only the differences in the claims will be addressed. Applicant has added the limitation that the second housing comprises a display and a speaker. Kim teaches a display (50 in fig. 3) and speaker (40 in fig. 3) in the second housing. Applicant has further added the limitation stating that the numeric keypad is opaque. While extremely obvious to one of ordinary skill in the art, Kim, Won and Hsu do not disclose expressly that the keypad comprises an opaque numeric keypad. However, Motegi discloses an opaque numeric keypad (¶0030 of Motegi).

Motegi, Kim, Hsu and Won are analogous art because they are from the same field of endeavor, namely input devices. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use an opaque numeric keypad in view of the teachings of Motegi. The motivation for doing so would have been because Kim had to use either a transparent, translucent or opaque keypad. All three types are notoriously old and well known in the art. Almost all ordinary home/mobile phones and many other mobile devices use opaque keypads. It would have been design choice as to which type of keypad is better suited for the design of the mobile device. Therefore, it would have been obvious to use opaque keypads to obtain the invention as specified in claim 23.

***Response to Arguments***

4. Applicant's arguments filed 8/10/2007 have been fully considered but they are not persuasive.

Applicant asserts that the combination of references is improper hindsight reasoning. In response to applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Here, Examiner has only used knowledge which was within the level of ordinary skill for the telephony art. For example, Examiner provided an additional reference to evidence the fact that incandescent light sources, laser pointers, and LEDs were well known in the telephony art at the time of the invention. A person of ordinary skill in the telephony art would have understood that these light sources were commonly used. In particular, LEDs are the most commonly used light source in mobile devices because of their low power demand.

In addition, Examiner provided an additional reference to evidence the fact that opaque keypads were old and well known at the time of invention. This assertion was also within the knowledge of one of ordinary skill. Almost all phones in production have opaque keypads. Thus, Examiner has not included knowledge

gleaned from applicant's disclosure. Examiner used knowledge that one of ordinary skill in the telephony art would have possessed at the time of the invention. It would be hard argue that one of ordinary skill in the telephony art would not have known about opaque keypads, LEDs, and incandescent lights. Examiner could have stated that such features were obvious and provided no art. However, in the interest of compact prosecution and a comprehensive examination, Examiner provided the art for opaque keypads and LEDs.

Moreover, as discussed in the recent *KSR* decision, combinations of known elements with predictable results do not rise to the level of patentability. Here, including an opaque keypad and a LED light source gives predictable results. Such ideas are common in the telephony are and do not provide unpredictable results.

Additionally, Applicant asserts that Examiner is speculating about the light source in the closed position. Examiner respectfully disagrees. If a light source were put on the integrated hinge of Won (7 in fig. 1 of Won), the light source would move proportional to the closing motion. When the device was fully closed, the light source would be aimed external to the device. The reason to make such a modification is because Kim contemplated the idea (see fig. 6). Thus, one of ordinary skill would have been motivated based on the teachings of Kim and Won. Specifically, when the teachings of Kim were applied to the old and well-known clam-shell configuration of Won, such a modification is necessary and apparent to one of ordinary skill in the art. Moreover, Kim contemplated such a modification since Kim stated, "it should be noted that the present invention is not limited thereto but various changes and modifications

can be embodiment to include at least one lamp" (col. 2 lines 41 – 43 of Kim). Thus, it was contemplated at the time of invention that modifications could be made as long as they include "at least one lamp" and do not depart from the scope of the invention. An obvious change or modification to one of ordinary skill in the art at the time of the invention would have been to use the invention of Kim in various different style, type, brand, shape, and configuration mobile phones (without departing from the scope of the invention).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aamir Haq whose telephone number is 571-272-5511. The examiner can normally be reached on Mon thru Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



A.H.  
October 3, 2007



AHMAD F. MATAR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700